

REMARKS

Summary of Office Action

Claim 10 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Banzi Jr. et al. (US Pat. No. 6,326,874) in view of Ishiwaki (US 5,847,518).

Claims 11, 12 and 14-16 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Banzi, Jr. et al. in view of Ishiwaki as applied in claim 10 above and further in view of Kawano et al. (U.S. Patent No. 5,736,917).

Claims 13 and 17 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Banzi, Jr. et al. in view of Ishiwaki and further in view of Kawano et al. as applied in claims 12 and 14 above and further in view of Takebuchi (JP 10135042).

Summary of the Response to the Office Action

Claims 10 and 13 have been amended. Claim 12 has been cancelled. More specifically, claim 10 has been amended to incorporate the features of its dependent claim 12, and claim 13 has been amended to change its dependency from now cancelled claim 12 to that of claim 10. Accordingly, no new matter has been added.

Claims 1-9, 18, and 19 stand cancelled without prejudice or disclaimer.

Claims 10-17 are pending for consideration.

All Claims Comply With 35 U.S.C. §103

Claim 10 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Banzi Jr. et al. in view of Ishiwaki. Claims 11, 12 and 14-16 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Banzi, Jr. et al. in view of Ishiwaki as applied in

claim 10 above and further in view of Kawano et al. Claims 13 and 17 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Banzi, Jr. et al. in view of Ishiwaki and further in view of Kawano et al. as applied in claims 12 and 14 above and further in view of Takebuchi. Applicants respectfully traverse.

As amended, independent claim 10 recites, in part, a “coil continuously wound starting from one end of the coil winding part and *terminating at another end* thereof and connected to two lead pins at a primary side and a secondary side without using a return wire, the coil being continuously wound from one side of the coil winding part to another side thereof, *such that a number of windings is periodically increased in the vertical direction.*” (Emphasis added.) Independent claim 14 recites, in part, “at least *two coil blocks* wound with the coil for each block by a desired winding frequency and continuously arranged starting from one end of the coil winding part and *terminating at another end* thereof and connected to two lead pins at a primary side and a secondary side without using a return wire.” (Emphasis added.)

Banzi fails to teach at least these features, as acknowledged in the Office Action. Kawano was relied upon as allegedly teaching the coil being continuously wound from one side of the coil winding part to another side thereof, such that a number of windings is periodically increased in the vertical direction (claim 10) and at least two coil blocks wound with the coil for each block by a desired winding frequency and continuously arranged (claim 14). While Applicants disagree, the alleged combination of Banzi and Kawano still fails to teach a coil arranged starting from one end of the coil winding part and terminating at another end, as acknowledged in the Office Action. Therefore, in order to meet this feature, the Office Action

alleged combination of Banzi and Kawano with the teaching of Ishiwaki because Ishiwaki specifically *teaches away* from such a coil.

The reason Ishiwaki teaches that the winding starts from terminal 16 and ends at terminal 16' is that Ishiwaki specifically teaches that the winding of one wire *should not overlap*. More specifically, Ishiwaki teaches:

A secondary coil is regularly and orderly wound around the bobbin between the low voltage side flange and the high voltage side flange. The term "regularly wound" or "orderly wound" referred to herein means that a wire for the secondary coil is wound around the bobbin in such a manner that any one of turns of the coil *is not put on top of another turn* and that each turn is closely arranged without leaving a gap between any of two adjacent turns as shown in FIG. 6 by a coil A or a coil B. (Col. 4, ll. 57-63.) (Emphasis added.)

This is re-emphasized in the following passage of Ishiwaki:

The secondary coil may be a single layer of the regularly and orderly wound coil, or a multi layer, as shown in FIG. 6, comprising a *plurality* of the *single layered regularly and orderly wound coils*. In FIG. 6, the coil A is first regularly and orderly wound in a single layer on the bobbin 6, and then the coil B is regularly and orderly wound in a single layer on the coil A *by a separate wire* in the same direction as that of the coil A so that each turn of the coil B is positioned just above the turns of the coil A as shown in FIG. 6. The starting points of winding the coils A and B, and the end points of winding the coils A and B are respectively connected to each other. (Col. 4, ln. 66 – col. 5, ln. 7.) (Emphasis added.)

Therefore, Ishiwaki specifically teaches that the bobbins 6 should only have a *single layer winding*. Because of this feature, the winding can only begin on one side and end on the other. In other words, the feature of the winding starting on one side and ending on the other is dictated by Ishiwaki's specific teaching that the windings around the bobbin can only be in single layers. By contrast, the alleged combination of Banzi and Kawano must be a coil that is continuously

wound and overlapping.

Courts have held that “prior art must be considered in its *entirety*, i.e., as a whole, including portions that would *lead away* from the claimed invention.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.* 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) (emphasis added); see also MPEP §2141.02. The courts have held that it is *improper to combine* references where the *references teach away* from their combination. *In re Grasselli*, 713 F.2d 731, 743, USPQ 769, 779 (Fed. Cir. 1983) (emphasis added); see also MPEP §2145(X)(D)(2)). Therefore, Applicants submit that asserting an advantage of Ishiwaki (i.e., terminals on opposite ends) that is dictated by a required structure that teaches away from the alleged combination is not a proper motivation to establish a *prima facie* case of obviousness. Accordingly, Applicants respectfully submit that the alleged combination is improper and request that the §103 rejection of independent claim 10, as amended, (i.e., cancelled claim 12) and independent claim 14 be withdrawn.

Claims 11, 13, and 15-17 each depend from one of independent claims 10 and 14, thereby incorporating all the features of their base claim. Moreover, Takebuchi does not and cannot cure the deficiencies of Banzi, Ishiwaki, and Kawano discussed above. Accordingly, Applicants submit that claims 10, 11, and 13-17 are now in condition for allowance.

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CONCLUSION


In view of the foregoing, reconsideration and timely allowance of the pending claims are respectfully requested. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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